

**PETITION FEE**  
**Under 37 CFR 1.17(f), (g) & (h)**  
**TRANSMITTAL**

(Fees are subject to annual revision)

Send completed form to: Commissioner for Patents  
P.O. Box 1450, Alexandria, VA 22313-1450

Application Number	10/761,578
Filing Date	January 21, 2004
First Named Inventor	Falko
Art Unit	2173
Examiner Name	
Attorney Docket Number	Altova-001

Enclosed is a petition filed under 37 CFR 1.17(h) that requires a processing fee (37 CFR 1.17(f), (g), or (h)). Payment of \$ 130.00 is enclosed.

This form should be included with the above-mentioned petition and faxed or mailed to the Office using the appropriate Mail Stop (e.g., Mail Stop Petition), if applicable. For transmittal of processing fees under 37 CFR 1.17(i), see form PTO/SB/17i.

**Payment of Fees** (small entity amounts are NOT available for the petition fees)

☐ The Commissioner is hereby authorized to charge the following fees to Deposit Account No. \_\_\_\_\_:

☐ petition fee under 37 CFR 1.17(f), (g) or (h) ☐ any deficiency of fees and credit of any overpayments

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**Petition Fees under 37 CFR 1.17(f): Fee \$400 Fee Code 1462**

For petitions filed under:

- § 1.53(e) - to accord a filing date.
- § 1.57(a) - to accord a filing date.
- § 1.182 - for decision on a question not specifically provided for.
- § 1.183 - to suspend the rules.
- § 1.378(e) - for reconsideration of decision on petition refusing to accept delayed payment of maintenance fee in an expired patent.
- § 1.741(b) - to accord a filing date to an application under § 1.740 for extension of a patent term.

**Petition Fees under 37 CFR 1.17(g): Fee \$200 Fee Code 1463**


For petitions filed under:

- § 1.12 - for access to an assignment record.
- § 1.14 - for access to an application.
- § 1.47 - for filing by other than all the inventors or a person not the inventor.
- § 1.59 - for expungement of information.
- § 1.103(a) - to suspend action in an application.
- § 1.136(b) - for review of a request for extension of time when the provisions of section 1.136(a) are not available.
- § 1.295 - for review of refusal to publish a statutory invention registration.
- § 1.296 - to withdraw a request for publication of a statutory invention registration filed on or after the date the notice of intent to publish issued.
- § 1.377 - for review of decision refusing to accept and record payment of a maintenance fee filed prior to expiration of a patent.
- § 1.550(c) - for patent owner requests for extension of time in ex parte reexamination proceedings.
- § 1.956 - for patent owner requests for extension of time in inter partes reexamination proceedings.
- § 5.12 - for expedited handling of a foreign filing license.
- § 5.15 - for changing the scope of a license.
- § 5.25 - for retroactive license.

**Petition Fees under 37 CFR 1.17(h): Fee \$130 Fee Code 1464**

For petitions filed under:

- § 1.19(g) - to request documents in a form other than that provided in this part.
- § 1.84 - for accepting color drawings or photographs.
- § 1.91 - for entry of a model or exhibit.
- § 1.102(d) - to make an application special.
- § 1.138(c) - to expressly abandon an application to avoid publication.
- § 1.313 - to withdraw an application from issue.
- § 1.314 - to defer issuance of a patent.

  
Signature

David H. Judson

Typed or printed name

12/7/2004

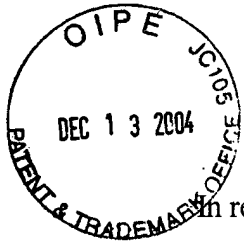
Date

30,467

Registration No., if applicable

This collection of information is required by 37 CFR 1.17. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 5 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Falk et al.  
Serial Number: 10/761,578  
Filing Date: January 21, 2004  
Group Art Unit: 2173

For: **METHOD AND SYSTEM FOR AUTOMATING CREATION  
OF MULTIPLE STYLESHEET FORMATS USING AN  
INTEGRATED VISUAL DESIGN ENVIRONMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Attention: Group Director, Group 2173

**PETITION TO MAKE SPECIAL FOR NEW  
APPLICATION UNDER MPEP §708.02, VIII**

Applicant hereby petitions to make special the above-referenced new application, which has not received any examination by the Examiner.

All of the claims in this case are believed directed to a single invention. If the Office determines that all claims present are not obviously directed to a single invention, Applicant will make an election without traverse as a prerequisite to the grant of special status.

There has been a search made with respect to the patentability of this invention. In particular, in December 2004, a preliminary search of patents and published applications was performed through the United States PTO Web site search engine (at [www.uspto.gov](http://www.uspto.gov)) using various keywords, both alone and in combination, including: "XSLT," "design," "stylesheet," "stylesheet repository," "XSL" and "XSL:FO." Several patents and published applications were located as a result of that search, and these references are submitted herewith, together with an Information Disclosure Statement and

a copy of the references. These references are deemed by Applicants most closely related to the subject matter encompassed by the claims. The references also are described more fully below. Also attached is Form PTO 1449.

### The Invention

The Background of the Invention portion of the subject application (on pages 1-3) provides the context of the present invention, namely, the problem of data integration, the value of Extensible Markup Language (XML), the ancillary technologies associated with XML including, without limitation, XSL and XSLT, and the existence of prior art visual data mapping tools that have been created to accelerate the implementation of XSLT stylesheets. With this background, the present invention is an improvement to a data processing system having a windows-based graphical user interface (GUI). The invention enables support for visual editing and generation of extensible Stylesheet Language (XSL) code, such as XSL code that enables XML content to be rendered into an HTML file, XSL:FO code that enables XML content to be rendered into a PDF file, and the like. With a single stylesheet design, developers can preview an output of a stylesheet transformation in one of several different formats, e.g., HTML, PDF, or others.

In an illustrative embodiment, a method of and system for automatic writing of complex stylesheets preferably uses an intuitive drag-and-drop user interface. By opening an existing structured data source (e.g., an XML document, an XML Schema, DTD, relational database, EDI document, a Web service, or the like), a content model appears in a given display panel, preferably in a tree-like controller. The designer then selects an element or attribute that he or she desires to appear in an output and drags it from the given display panel to a main output window. The designer then specifies how he or she would like the new node to be handled (e.g., as a new paragraph, image, table, or the like). A stylesheet, sometimes referred to as a "meta stylesheet," is automatically generated (or is generated as the designer positions elements and attributes in the main output window). Typically, the meta stylesheet is maintained as an internal data representation, although it may be displayable if desired. According to an aspect of the invention, two or more stylesheets are generated from the meta stylesheet and from within the integrated visual design environment, with each of the stylesheets being useful for

generating the document being designed in a given output format. Thus, in a representative example, the two or more stylesheets include a first XSLT stylesheet for transforming an XML document into HTML, and a second XSLT stylesheet to facilitate transformation of the XML document into PDF via XSL:FO. Each of the stylesheets may be automatically previewed in the GUI by simply selecting a preview tab. Another control tab may be used to preview the output document rendered through the respective stylesheet.

Thus, according to the invention, a unified visual design environment is provided in a data processing system to enable automatic generation of a plurality of stylesheets for different output formats. The invention enables support for visual editing and generation of extensible Stylesheet Language (XSL) code, such as XSL code that enables XML content to be rendered into an HTML file, XSL:FO code that enables XML content to be rendered into a PDF file, and the like. With a single stylesheet design, developers can preview an output of a stylesheet transformation in one of several different formats, e.g., HTML, PDF, or others.

#### Detailed Discussion Of The References

Huang et al., Published Patent Application 20020147748, relates generally to document processing and electronic publishing and, in particular, to techniques for designing extensible stylesheets. In this application, meta-tag information is used to design extensible stylesheets (XSL) for transferring a source XML file into a target file. According to one aspect, when a target file is displayed (e.g., in a browser or authoring tool), the output presentation includes a number of objects, such as a picture or a sentence or a group of words. Some of the objects are dynamic in a sense that these objects are respectively linked with source elements or objects in the source file so that any changes to the source objects will be dynamically reflected in the target file. Each of the meta-tags inserted specifies a relationship to the corresponding source object in the source file.

Kim et al., Published Patent Application Nos. 20030120671 and 20030120686, also relate generally to techniques for designing extensible stylesheets using meta-tag information and/or differentiated associated meta-tag information, where the stylesheets are useful to facilitate information exchange. In these applications, as in the Huang et al.

application, meta-tag and/or associated meta-tag information is used to design extensible stylesheets (XSL) for transferring a source XML file into a target file. According to one aspect, a given stylesheet (e.g., an XSL or XSLT file) is generated from a source file (e.g., an XML file) by first differentiating all meta-tag and/or associated meta-tag information, e.g., by attaching respectively unique identifiers to those that are otherwise identical. To facilitate user required operations on certain data in the source file, a document source path for the data is identified and inserted with one or more operators to form document source path information. The differentiated meta-tag and/or associated meta-tag Information and source path information are relied upon to generate one or more stylesheets.

According to another feature as described in these applications, Kim et al. describe a graphic user interface (GUI) environment to allow a user to visually manipulate or operate the meta-tag and/or associated meta-tag information. The GUI includes at least two displays. One of the displays is from a commonly used browser or an application to display a target file including a plurality of objects, and the other display is used to facilitate the editing of a tree structure. According to the inventors, each of the nodes in the tree structure is associated with one of the objects by associated meta-tag information. Based on the tree structure, a source can be generated. Together with the source file, the stylesheet then is designed in accordance with the displayed target file. The GUI environment described in these patent applications thus is an example of a prior art visual design environment.

Parker et al., Published Patent Application 20030237046, relates to enabling a user to graphically modify a transformation stylesheet, and more particularly, to automatically propagating changes bi-directionally between an output document and a corresponding transformation stylesheet. In particular, Parker et al. describe a method and system for displaying data in a document according to a transformation stylesheet, and enabling a user modification of the document to automatically update the transformation stylesheet. Similarly, a user modification of the transformation stylesheet automatically updates the document. Thus, Parker et al. provide a means for automatically mapping modifications of the document back to the transformation

stylesheet, and for automatically mapping modifications of the stylesheet into the document. A preferred embodiment is an editor having a GUI that enables users to accomplish the mappings of such modifications without requiring that users have programming skills. The invention also maintains selection data so that the user interface is generally consistent with conventional editors. The selection data are maintained by mapping the modifications rather than simply replacing the transformation stylesheet or replacing the document.

Su et al., Published Patent Application 20030167445, relates to techniques for enabling document transformation between a source Extensible Markup Language (XML) schema and a target XML schema. The application describes a method and system for the transformation between two extensible markup language (XML) documents. Specifically, embodiments of the present invention disclose a system and method comprising modeling a source XML document corresponding to a source schema as a source tree having a plurality of source nodes, and modeling a target XML document corresponding to a target schema as a target tree having a plurality of target nodes. A sequence of transformation operations that transforms the source tree to the target tree is then generated.

U.S. Patent No. 6,643,652 to Helgeson et al. describes a system and method for managing data exchange among systems in a network. The systems and methods translate data from a system specific local format to a generic interchange format object, and vice versa, with predefined stylesheets using generic components and a system specific service components that utilize a native application programming interface of the specific local system. Helgeson et al. thus describe the basic data integration problem and the use of predefined stylesheets to facilitate data interchange.

U.S. Patent No. 6,540,142 to Alleshouse is considered to be of background interest. It describes an XML processing system for use in a barcode printer apparatus. The system includes a computer system having an XML processor configured to receive, parse, and process an XML input data stream and obtain schema identified in the XML data stream from a schema repository. The XML processor validates the XML data stream based upon the schema obtained. An XSLT processor is included and configured

to obtain a stylesheet identified in the XML data stream from a stylesheet repository. The XSLT processor transforms data in the XML input data stream into transformed XML data based upon the stylesheet obtained. Also, an XSL:FO processor formats the transformed XML data into formatted XML data based upon XSL:FO instructions contained in the stylesheet. A barcode rendering subsystem then receives the formatted XML data and generates a bit map representative of the bar code label.

U.S. Patent No. 6,675,354 to Claussen et al. is considered to be of background interest. This patent describes a method for processing custom tags in a document object model (DOM) representation irrespective of the case in which the tags are authored. In an illustrative embodiment, a document object model (DOM) tree is processed to identify custom tags. Upon encountering a custom tag, an appropriate tag handler (e.g., a Java object, an XSL stylesheet, or the like) is invoked. According to the invention, a tag recognition routine is used for recognizing and handling case-insensitive custom tags. As a servlet engine is examining a tag name, if the name does not match one of the registered tags, the routine converts the name to neutral case. If the tag recognition routine recognizes the name as one of the case-insensitive tags, it converts the attributes to the appropriate case and hands the resulting element off to a correct tag handler for processing.

As can be seen, none of the references describe or suggest the following invention: an integrated visual design environment having a first display panel in which a structured data source is displayed, and a second display panel for displaying a document being designed from the structured data source; code responsive to selection and positioning in the second display panel of given design elements or attributes from the structured data source for generating a meta stylesheet; and code for automatically generating from the meta stylesheet two or more stylesheets from within the integrated visual design environment, wherein each of the stylesheets is useful for generating the document being designed in a given output format.


Further, there is no suggestion or motivation within any of these references to combine their teachings in any way that would render the subject matter of the present invention, taken as a whole, obvious within the meaning of 35 U.S.C. § 103(a).

The Petition Fee

The fee required by 37 C.F.R. §1.17(h) is to be paid by the attached check in the amount of \$130.00.

Applicants request that the above-referenced application be granted special status and that the special prosecution proceed according to the procedure sets forth in MPEP §708.02, VIII. Applicants stand ready to work with the Examiner assigned to this case to expedite the examination of this application in all ways consistent with the procedures outlined in this rule.

Respectfully submitted,

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972-385-2018